CLAIMS

What is claimed is:

1. A method of providing a plurality of parameter values to an interface requiring the plurality of parameter values, the parameter values based upon data inputs including required data inputs and optional data inputs, the method comprising the steps of:

receiving required data input values and specified optional data input values;

performing predetermined functions to calculate data input values for nonspecified optional data inputs, wherein the calculations are performed independent
of the order of the data inputs;

using the calculated values for the non-specified optional data inputs and the values for the required data inputs and specified optional data inputs to determine at least some of the plurality of parameter values; and

providing the plurality of parameter values for use by the interface.

- 2. The method according to claim 1 wherein the data inputs further comprise locked data inputs, and further comprising calculating the values of at least some of the locked data inputs using the predetermined functions.
- 3. The method according to claim 2 further comprising receiving values for at least some of the non-specified optional data inputs and using the calculated values and received values of the optional data inputs to determine some of the plurality of parameter values.

- 4. The method according to claim 2 further comprising providing an error indication if a value is input for any of the locked data inputs.
- 5. The method according to claim 1 wherein the required data inputs comprise user specified data inputs and predetermined stored data inputs and further comprising checking to ensure that all required data inputs are specified.
- 6. The method according to claim 5 further comprising providing an error indication if a value is not input for any of the user specified required data inputs.
- 7. The method according to claim 1 wherein the values of at least some of the required data inputs are provided from a computer program and further comprising confirming the entry of values for the required data inputs from the computer program.
- 8. The method according to claim 1 wherein the plurality of input parameter values are used by an analysis program and wherein the step of providing the plurality of parameter values further comprises configuring the values for use by the analysis program.

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9. The method according to claim 8 further comprising providing the predetermined functions as a component of a wrapped program for use with the analysis program.

- 10. The method according to claim 1 wherein the step of performing predetermined functions further comprises recursively performing the predetermined functions.
- 11. The method according to claim 10 further comprising employing a branching structure for recursively performing the predetermined functions.

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12. A method of providing a wrapped component as part of a software program, the wrapped component using data parameters to determine values for a plurality of inputs required by the software program, the method comprising the steps of:

employing a plurality of data parameter types for use in determining the plurality of inputs;

identifying the data parameters based upon parameter type;

receiving values for at least some of the data parameters of a specific parameter type;

calculating values for at least some of the data parameters of a specific parameter type using predetermined functions and independent of the order of the data parameters and the order of function specification;

determining values for at least some of the plurality of inputs for use by the software program based upon the data parameter values; and

providing the plurality of input values from the component to the software program.

13. The method according to claim 12 wherein the step of calculating values comprises recursively using the predetermined functions to calculate the values.

The method according to claim 12 wherein the step of employing a

plurality of data parameter types comprises using specified data parameters and

fixed data parameters.

15. The method according to claim 12 wherein the step of employing a

plurality of data parameter types comprises using optional data parameters and

required data parameters.

16. The method according to claim 15 further comprising specifying at

least some of the optional data parameters.

17. The method according to claim 16 wherein the step of calculating

values for at least some of the parameters further comprises calculating values for

optional data parameters not specified.

18. A method for determining the value of each of a plurality of parameters for use as an input file to a computer program, the parameters including required and optional parameters, and the method comprising the steps of:

determining the specific parameters to provide as part of the input file;
receiving values for the required parameters and any optional parameter
having a specified value;

checking that values for the required parameters to be included as part of the input file are specified, and if not specified, providing an error indication;

identifying optional parameters not specified to be included as part of the input file;

calculating the value of each of the identified non-specified optional parameters independent of the order of the parameters; and

providing parameter values as part of the input file for use by the computer program.

- 19. The method according to claim 18 wherein the parameters further comprise locked parameters and the method further comprises calculating the value of at least some of the locked parameters.
- 20. The method according to claim 19 further comprising providing an error indication for a locked parameter that is input.

21. The method according to claim 18 further comprising employing a recursive branching structure for calculating the identified non-specified optional and locked parameter values.

22. The method according to claim 21 further comprising automatically determining the order of parameter calculation.

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23. An interface for guiding a user to provide a data set to a complex computer program, and providing the data set to the complex computer program, the interface comprising:

means for accepting input of at least one required user input from a user;

means for accepting input of at least one optional user input from a user, and in the absence of an input of an optional user input, calculating a default input based upon a predetermined formula using a recursive algorithm; and

means for providing the data set of inputs to the complex computer program.

- 24. The interface according to claim 23 wherein the predetermined formula for calculating the default input depends upon at least one mandatory user input.
- 25. The interface according to claim 23 further comprising means for generating at least one locked input.
- 26. The interface according to claim 25 wherein the means for generating at least one fixed input comprises means for calculating the at least one locked input based upon at least one required user input.
- 27. The interface according to claim 25 wherein the means for generating at least one locked input comprises means for calculating the at least one locked input based upon at least one optional user input.

28. An interface for guiding a user to provide a data set to a complex computer program, the interface comprising a processor programmed to accept inputs of at least one required user input from a user and to accept inputs of at least one optional user input from a user, and to calculate a default input in the absence of an input of an optional user input.

29. A method of providing inputs to a complex computer program, the method comprising:

accepting required user inputs from a user; and

accepting optional user inputs from the user, and in the absence of an input for an optional user input, calculating an input based upon a predetermined formula using a recursive algorithm.